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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* LYNDON W. GRAHAM,  
KYLE HANSON, THOMAS L. RITZDORF,  
and JEFFREY I. TURNER

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Appeal 2009-002436  
Application 09/977,410  
Technology Center 1700

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Decided: September 29, 2009

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Before EDWARD C. KIMLIN, ADRIENE LEPIANE HANLON, and  
MARK NAGUMO, *Administrative Patent Judges*.

HANLON, *Administrative Patent Judge*.

DECISION ON APPEAL

A. STATEMENT OF THE CASE

This is an appeal under 35 U.S.C. § 134 from an Examiner's decision rejecting claims 35, 36, and 38. We have jurisdiction under 35 U.S.C. § 6(b). We AFFIRM-IN-PART.

According to the Appellants, the instant Application was filed to provoke an interference with US 6,132,587 issued to Jorne on October 17, 2000. The Appellants state that they copied claims 1, 2, 5, and 19 of the Jorne patent as claims 35-38, respectively.<sup>1</sup> Br. 1.<sup>2</sup> Claim 37 has been cancelled, and claims 35, 36, and 38 are the subject of this appeal. Claims 35 and 38 read as follows:

35. An electroplating device for wafer metallization of a wafer for interconnection comprising:

a reservoir for electrolyte,

a holder adapted to hold the wafer above said reservoir,

a counter-electrode in said reservoir,

means adapted for passing current between said counter-electrode and the wafer in said holder,

a pump adapted for pumping electrolyte from said reservoir against the wafer in said holder,

*a non-conducting porous separator between said wafer holder and said counter-electrode.*

38. An electroplating device of wafers for interconnection comprising:

a reservoir for electrolyte,

a holder adapted to hold a wafer above said reservoir,

a counter-electrode in said reservoir,

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<sup>1</sup> It is not necessary to copy a claim from a patent to provoke an interference with that patent. *See* 37 C.F.R. § 41.202 (2008).

<sup>2</sup> Appeal Brief dated February 28, 2007.

means for passing current between said counter-electrode and a wafer in said holder,

a pump for pumping electrolyte from said reservoir against said wafer, and

*a distributor positioned in said reservoir including a disk having a plurality of holes adapted to provide a flow of electrolyte through the disk that is uniform along a radius of the disk.*

Br., Claims Appendix (emphasis added).

The following Examiner's rejections are before us on appeal:

- (1) Claims 35 and 38 are rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement.
- (2) Claim 36 is rejected under 35 U.S.C. § 102(b) as anticipated by Mori.<sup>3</sup>

#### B. ISSUES

The only issues on appeal relate to the patentability of claims 35, 36, and 38. Those issues are:

- (1) Have the Appellants shown reversible error in the Examiner's finding that the original disclosure of the instant Application does not provide written description support for a "porous separator" as recited in claim 35?
- (2) Have the Appellants shown reversible error in the Examiner's finding that the original disclosure of the instant Application does not provide written description support for a distributor that includes "a disk having a plurality of holes adapted to provide a flow of electrolyte through the disk that is uniform along a radius of the disk" as recited in claim 38?

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<sup>3</sup> US 5,443,707 to Mori issued August 22, 1995.



According to the Appellants' Specification:

Fig. 8 also shows a diffusion plate 375 provided above the anode 334 for providing a more even distribution of the fluid plating bath across the wafer W. Fluid passages are provided over all or a portion of the diffusion plate 375 to allow fluid communication therethrough.

Spec. 21:23-22:2.

D. PRINCIPLES OF LAW

The test for determining compliance with the written description requirement of 35 U.S.C. § 112, first paragraph, is whether the disclosure of an application, as originally filed, reasonably conveys to one of ordinary skill in the art that the inventor had possession at that time of the later claimed subject matter. *In re Kaslow*, 707 F.2d 1366, 1375 (Fed. Cir. 1983).

“[T]he invention claimed does not have to be described in *ipsis verbis* in order to satisfy the description requirement of § 112.” *In re Lukach*, 442 F.2d 967, 969 (CCPA 1971). However, the description must be sufficiently clear that one of ordinary skill in the art would have recognized from the disclosure that the applicant invented the later claimed subject matter. *In re Wertheim*, 541 F.2d 257, 262 (CCPA 1976).

E. ANALYSIS

1. Issue (1)

The Appellants rely on the diffusion plate 375 illustrated in Figure 8 as well as page 21, line 23 through page 22, line 2 of the original disclosure to establish written description support for the “porous separator” recited in claim 35. Br. 7-8; Ans. 4, 5.<sup>4</sup>

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<sup>4</sup> Examiner's Answer dated July 16, 2007.

The Examiner found that Figure 8 depicts the diffusion plate 375 as having distinct “holes.” However, the Examiner found that “holes” are not synonymous with “pores.” In particular, the Examiner found that “holes” are larger than “pores.” For this reason, the Examiner found that the original disclosure does not provide written description support for the “porous separator” recited in claim 35. Ans. 4-5.

The Appellants argue that the original disclosure describes openings of any size that permit the uniform distribution of liquid over the surface of a wafer. Since “holes” and “pores” are both capable of performing that function, the Appellants argue that the original disclosure provides written description support for the “porous separator” recited in claim 35. Br. 9-10.

The Appellants’ position is supported by the record. The portion of the original disclosure relied on by the Appellant describes the openings depicted in Figure 8 as “fluid passages.” The original disclosure does not expressly limit the size of the fluid passages but merely requires the fluid passages to allow the “communication” of fluid through the diffusion plate 375. Spec. 22:1-2. We find that one of ordinary skill in the art would have understood that “holes” as well as “pores” would permit the communication of fluid through the diffusion plate 375. Therefore, it is reasonable to find that the original disclosure conveys possession of a “porous separator” as recited in claim 35.

## 2. Issue (2)

The Appellants rely on the diffusion plate 375 illustrated in Figure 8 as well as page 21, line 23 through page 22, line 2 of the original disclosure to establish written description support for the distributor recited in claim 38. Br. 4, 10; Ans. 4, 5. The Examiner found that this portion of the original

disclosure does not discuss flow which is “uniform along a radius of the disk” as recited in claim 38. Ans. 5-6.

The Appellants argue that the original disclosure describes the function of the diffusion plate 375 as ensuring more even distribution of the plating fluid across the wafer and discloses that fluid passages are provided “over all or a portion” of the diffusion plate. Spec. 22:1-2. The Appellants contend that “passages over all of the diffusion plate necessarily means that the openings extend over a diameter of the wafer along two radiuses.” Br. 10. Thus, the Appellants argue, one skilled in the art would understand that uniformity “along a radius of the disk” as recited in claim 38 is supported by the original disclosure. *Id.*

The Appellants’ position is supported by the record. As pointed out by the Appellants, the original disclosure states that the diffusion plate provides a “more even distribution of the fluid plating bath across the wafer W,” and “[f]luid passages are provided over all or a portion of the diffusion plate 375.” Spec. 21:23-22:2. We find that this disclosure reasonably conveys possession of a diffusion plate having fluid passages provided over the entire diffusion plate, including along a radius thereof. We also find that this disclosure reasonably conveys possession of a diffusion plate having fluid passages that provide an even or uniform distribution of the plating bath through the diffusion plate, including along a radius thereof.

### 3. Issue (3)

The Appellants do not contest the merits of the rejection of claim 36 set forth on page 6 of the Examiner’s Answer. Instead, citing *Schulze v. Green*, 136 F.3d 786 (Fed. Cir. 1998), the Appellants argue that the Board



should defer consideration of this rejection until an interference is declared.  
Br. 12.

The facts in *Schulze* are inapposite to the facts in this case. In *Schulze*, the Appellants filed a motion to correct the inventorship of their application during the course of an interference proceeding. *Id.* at 790. Since the issue was fairly raised during the interference, the Court determined that the issue had to be resolved *inter partes*. *Id.* at 791. The Court explained, “As the legislative history of the 1984 Amendments reflects, by combining the two boards, ‘all issues of patentability and priority which arise in an interference can be decided in a single proceeding rather than in a series of complicated *inter partes* and *ex partes* proceedings.’” *Id.*

In this case, the issue of the patentability of claim 36 arose during the course of the instant *ex parte* proceeding, not during an *inter partes* proceeding as in *Schulze*. Since an *inter partes* proceeding is not a substitute for an *ex parte* proceeding, the issue is properly decided in this *ex parte* appeal. *See also Brenner v. Manson*, 383 U.S. 519, 528 n.12 (1966) (explaining that determining patentability is a prerequisite to setting up an interference).

The Appellants do not contest the rejection of claim 36 on appeal. Therefore, the Examiner’s rejection of claim 36 is summarily affirmed.

#### F. DECISION

The rejection of claims 35 and 38 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement is reversed.

The rejection of claim 36 under 35 U.S.C. § 102(b) as anticipated by Mori is affirmed.

Appeal 2009-002436  
Application 09/977,410

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a).

AFFIRMED-IN-PART

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